Application No.: 09/749,440 Docket No.: 8733.373.00

Reply dated August 19, 2004

Reply to Office Action of May 19, 2004

**Listing of Claims:** 

1. (Currently Amended) A method of fabricating a liquid crystal display device,

comprising:

forming a liquid crystal panel including first and second substrates;

forming a ferroelectric liquid crystal layer between the first and second substrates of

the liquid crystal panel;

cooling the liquid crystal panel to a predetermined temperature so as to produce

monostable alignment [[of]] within the ferroelectric liquid crystal; and

heating the cooled liquid crystal panel substantially to room temperature.

2. (Currently Amended) The method of claim [[23]] 1, wherein the predetermined

temperature includes is in a range around -20°C.

3. (Previously Presented) The method of claim 1, wherein the ferroelectric liquid crystal

layer includes an anti-ferroelectric liquid crystal layer.

4. (Currently Amended) The method of claim 1, wherein the cooling produces a smeetic

phase includes a chiral smectic C phase in the ferroelectric liquid crystal.

5. (Currently Amended) The method of claim 1, wherein the <u>cooling produces a smeetic</u>

phase includes a chiral smectic C<sub>A</sub> phase in the ferroelectric liquid crystal.

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6. (Original) The method of claim 1, wherein the first substrate includes a transparent

material.

7. (Original) The method of claim 1, further comprising a step of forming a pixel

electrode on the first substrate.

8. (Original) The method of claim 1, further comprising a step of forming a thin film

transistor on the first substrate.

9. (Original) The method of claim 1, further comprising a step of forming a color filter

on the second substrate.

10. (Currently Amended) A method of fabricating a liquid crystal display device,

comprising:

forming a liquid crystal panel having a first substrate and a second substrate;

interposing a ferroelectric liquid crystal layer comprised of liquid crystal molecules,

between the first substrate and the second substrate;

cooling the liquid crystal layer to a predetermined temperature to form a monostable

alignment of the liquid crystal molecules; and

heating the cooled liquid crystal layer substantially to room temperature.

Claim 11 (Canceled).

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12. (Currently Amended) A method of fabricating a liquid crystal display device according to claim 10, wherein the liquid crystal layer is cooled predetermined temperature is below a smectic phase temperature.

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- 13. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 12, wherein the liquid crystal layer is subsequently heated above the smectic phase temperature.
- 14. (Currently Amended) A method of fabricating a liquid crystal display device according to claim [[24]] 10, wherein the predetermined temperature liquid crystal layer is cooled to about -20C.
- 15. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the ferroelectric liquid crystal layer includes an antiferroelectric liquid crystal layer.
- 16. (Currently Amended) A method of fabricating a liquid crystal display device according to claim 10, wherein the cooling produces a smeetic phase includes a chiral smeetic C phase in the ferroelectric liquid crystal layer.
- 17. (Currently Amended) A method of fabricating a liquid crystal display device according to claim 10, wherein the cooling produces a smeetic phase includes a chiral smeetic C<sub>A</sub> phase in the ferroelectric liquid crystal layer.

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18. (Currently Amended) A method of improving the contrast ratio of a liquid crystal

display device, comprising:

forming a liquid crystal panel having a first substrate, a second substrate, and an

interposed ferroelectric liquid crystal layer that is comprised of liquid crystal molecules;

cooling the liquid crystal layer to a predetermined temperature to form a monostable

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alignment of the liquid crystal molecules;

heating the cooled liquid crystal layer substantially to room temperature; and

passing light through said liquid crystal panel.

Claim 19 (Canceled).

20. (Currently Amended) A method of improving the contrast ratio of a liquid crystal

display device according to claim 18, wherein the liquid crystal layer is cooled predetermined

temperature is below a smectic phase temperature.

21. (Previously Presented) A method of improving the contrast ratio of a liquid crystal

display device according to claim 20, wherein the liquid crystal layer is subsequently heated

above the smectic phase temperature.

22. (Currently Amended) The method of claim 1, wherein the liquid crystal panel is

<del>cooled</del> <u>predetermined temperature is</u> below a smectic phase temperature.

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23. (Previously Presented) The method of claim 1, wherein the ferroelectric liquid crystal layer includes 2-methylbutyl p-[p(decyloxybenzylidene)-amino]-cinnamate (DOBAMBC).

- 24. (Previously Presented) A method of fabricating a liquid crystal display device according to claim 10, wherein the ferroelectric liquid crystal layer includes 2-methylbutyl p-[p(decyloxybenzylidene)-amino]-cinnamate (DOBAMBC).
- 25. (Previously Presented) A method of improving the contrast ratio of a liquid crystal display device according to claim 18, wherein the ferroelectric liquid crystal layer includes 2-methylbutyl p-[p(decyloxybenzylidene)-amino]-cinnamate (DOBAMBC).